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**ABSTRACT**

This collection of abstracts is part of a continuing series providing information on recent doctoral dissertations. The 29 titles deal with a variety of topics, including the following: (1) aspects of the organization of redundancy rules in the lexicon; (2) the adult role in early child language acquisition; (3) semantic categorization, intelligence, and language development; (4) lexical-generative grammar; (5) linguistic abilities of children with fetal alcohol syndrome; (6) deletion and interruption in comparatives; (7) semantic and syntactic aspects of children's questions at three linguistic stages; (8) metaphoricity, language, and mind; (9) field independence, grammatical awareness, and reading ability in second grade children; (10) the relationships among sugar-intake, attending related behavior, and the language development of preschool children; (11) the effect of linguistic awareness instruction on linguistic awareness concept development and reading attitudes of kindergarten children; (12) temporal features of infant speech; and (13) an interactive phonology of the English syllable. (FL)

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## ASPECTS OF THE ORGANIZATION OF REDUNDANCY RULES IN THE LEXICON

AMRITAYALLI, RAGHAVACHARI, PH.D. *Simon Fraser University (Canada)*, 1981. Supervisor: Richard C. DeArmond

This thesis examines the lexical redundancy rules for derivationally related words; and draws two theoretically relevant conclusions: that subcategorizational correspondences must be captured by lexical rules stated in terms of thematic functions, and that the rules for semantic and morphological redundancies are independent.

Subcategorizational correspondences in sentences and noun phrases are currently captured (by the X-bar theory of phrase structure) by generalizing the grammatical relations of the S to the NP. This strategy is shown to fail for deadjectival nominals, and to be inappropriate for deverbal nominals. In Chapter Two, an apparently irregular subcategorizational pattern is shown to arise for a semantically coherent class of verbs: causative verbs whose objects are "Experiencers." Crucial evidence comes from verbs which take both Experiencer and non-Experiencer objects, which are shown to have two patterns of nominalization.

In light of these data, the role of thematic functions in lexical rules is examined in Chapter Three. A distinction between "major" and "minor" lexical rules is retained, and two possible accounts of minor rules are compared: one where both grammatical and thematic information are accessed, another where only thematic information is accessed. The latter hypothesis is argued to be superior.

In Chapter Four, data are presented showing the cross-classification of morphological and semantic relationships between words, and this is shown to be problematic for the theory of word based morphology advocated by Aronoff. A model of the lexicon is developed which expresses the cross-classification.

## THE ADULT ROLE IN EARLY CHILD LANGUAGE ACQUISITION: A STUDY OF THE DIALOGUE OF TWO MOTHER-CHILD PAIRS

BAKER, LOIS JOSEPHINE, PH.D. *Simon Fraser University (Canada)*, 1981. Supervisor: Dr. C. Boutilier

In this descriptive study of the language growth and development of two boys between the ages of 2 and 3 years, the focus is on the mothers' roles as they provide language input through mother-child dialogue. From data provided by the transcription of monthly videotapes of natural play sessions in each home setting, three aspects of the conversations of the two dyads are considered: to what degree the range of speech strategy and style exhibited by one mother is different from that of the other mother; whether each mother's differences are reflected in recognizable ways in the speech performance of her own child; and, in spite of mother differences, what similarities there are between the two children in speech development at this stage. Unlike the children in many language studies, the subjects came from non-professional, non-academic family backgrounds. An abductive analytical approach is used, the goal being to throw more light on the process of rapid language acquisition that takes place in the child's third year. Work in the field in the 1960's and early 1970's had suggested that the mother's role is one of "simplicity and redundancy", a supposition that is challenged and then reoriented.

The study findings are cast in a general linguistic framework utilizing the descriptive analytical levels of phonetics, syntax, semantics, and pragmatics. There is a clear presentation and exegesis of the distinction between what are particular and shared linguistic developments in the two children. Phonetically, an echo phenomenon is observed to be operating, seemingly a rote replay mechanism relatively independent of cognitive and length restrictions. Salient prosodic qualities of each mother's speech are mirrored in her own child's performance, particularly as regards rate, elision, and pitch change factors. This repetitive type of speech appears to be well established even in the initial tapes. During the course of the year, developments in the spontaneous speech of the children are demonstrated to be similar in that both boys are able to use familiar stereotyped phrase and sentence forms by using syntagmatic and paradigmatic variations, a skill that is

characterized as an accumulative process. In this second type of speech production, length of utterance and extent of lexical choice increase over time. A third type of language use, in which there are elements of personal construction, makes an appearance occasionally but is little developed by either child. In the course of the analysis, C. S. Peirce's general categories (his icon, index, and symbol classification) are modified to suit the particular form of the data in order to establish a distinction between language that is mainly ostensive and informative in form and intent and language that is more clearly symbolic and predicative. The application of this distinction results in a demonstration of relationship between pragmatic-situational factors and language development in the context of mother-child language interplay. Within developmental limitations of an epistemological nature, the mother (adult) role in early child language acquisition is found to be definitive.

## A TEST OF SEMANTIC CATEGORIZATION, INTELLIGENCE AND LANGUAGE DEVELOPMENT: A COMPARATIVE STUDY

Order No. DA8208144

BOKLUND, SUSAN LOUISE, PH.D. *The University of Texas at Austin*, 1981. 164pp. Supervisor: Stephen C. Larsen

The purpose of this study was to analyze the reliability and validity of the *Semantic Categories Test* (SCT) by using other measures of language and intelligence as criterion variables. Three major questions were addressed by this study: (1) whether the SCT is meaningfully related to other measures of language and intelligence; (2) whether traits of semantic categories are meaningfully related to other measures of language and intelligence; and (3) whether reliability for the SCT will be significant across three administrations. Subjects were 107 normal four- and five-year old children.

Instrumentation consisted of the vocabulary subtest of the *Test of Language Development* (1977), 24 semantic items from the *Test of Early Language Development* (1981), the *Slosson Intelligence Test* (1963) and the *Semantic Categories Test* (in progress). The SCT is an attempt to operationalize the construct of semantic categorization as it relates to language development in young children. The SCT is an author-designed instrument consisting of two subscales called Form

and Function. The Form subscale refers to the traits Quantity and Color. The Function subscale refers to the traits Set Inclusion and Relational Concepts.

Results showed that retest reliability is consistently significant for total scores of the SCT but that significance varied with SCT traits depending on the time interval between testing. Internal reliability coefficients also indicated that the total score was significantly reliable, and the Form and Function subscales were less reliable. The results of validity measures showed there is a meaningful relationship between the SCT and other measures of language (TOLD; TELD). A meaningful relationship was also present between three of the four SCT traits (Set Inclusion, Relational Concepts, Quantity) and the TOLD and the TELD. In this study there appeared to be no meaningful relationship between the SCT and a measure of intelligence. The major hypotheses of this study appeared to receive support from the data presented.



**THE EFFECT OF FAMILIARITY WITH TOPICS ON SUCCESSFUL RESOLUTION OF *IT* AND *THIS* USED IN IMPLICIT ANAPHORIC RELATIONSHIPS** Order No. 8126620

BUCHHOLZ, THOMAS JEFFERY, Ph.D. *The University of Wisconsin-Madison*, 1981. 183pp Supervisor: Professor Dale D. Johnson

The study investigated the effect of familiarity with topics on the successful resolution of the inclusive anaphoric references *it* and *this* when used in implicit anaphoric relationships. In a pretest survey, forty-three sixth graders were asked to rate their familiarity with thirty topics. Topics were selected from textbooks available for use, but not being used, by the subjects. Each topic on the survey was identified by title, and each included a brief summary of the content. Six topics rated highest and six rated lowest were selected for test passages. Each test passage was new to the subjects, each was controlled for length and readability, and each included an inclusive anaphoric term, either *it* or *this*, in the last sentence. Validity of these measures was affirmed by a panel of language arts teachers. Following each passage where wh- questions for the subjects to answer. One question was about the implicit anaphoric relationship, and two were recall and vocabulary questions used as distractors. Both a pilot test and a primary test were administered. Each was untimed. Tests were scored by the language arts panel. Results of the primary test indicated a positive relationship between familiar topics and success with resolving the anaphoric relationships. There appeared to be no significant difference between resolving either anaphoric term, and there were no apparent differences due to sex. Subjects' overall success at resolving both high and low familiarity passages averaged about fifty percent. The results imply that familiarity with topics is a potent factor which might be used when introducing new linguistic structures. Results also imply that density of inclusive anaphoric references should be considered as a factor for assessing readability.

**LEXICAL-GENERATIVE GRAMMAR: TOWARD A LEXICAL CONCEPTION OF LINGUISTIC STRUCTURE**

Order No. 8128004

DEHL, LON GERALD, Ph.D. *Indiana University*, 1981. 415pp.

This study is an exploration of the consequences for linguistic theory of reconsidering certain basic assumptions current in the generative tradition of linguistic inquiry, which assumptions have to do with the optimal form of generative grammars of natural languages.

Two trends, recognized as of paramount significance in the history of the lexicalist mainstream of generative research, are noted: the progressive impoverishment of the transformational component of generative grammars and the progressive enrichment of the lexical component. These two mutually supporting trends, presumably understood at least within the lexicalist tradition as constituting genuine scientific progress, point to a hitherto unexplored logical conclusion: a model of generative grammar in which transformational rules and derivations are excluded altogether, a model in which an individual grammar consists solely of a lexicon. It is noted that such a model is of special interest within Chomskian lexicalism because its adoption would entail immense gains in explanatory adequacy.

The question, then, is whether such a model of grammar is empirically optimal as well, or even empirically adequate. This question merits investigation regardless of the optimality of the model under consideration. If such a model does indeed prove optimal, then there is obvious gain in our having leaped ahead directly to the logical conclusion of current trends; if, however, this model does not prove optimal, we profit nonetheless by knowing that either these trends are misdirected after all or optimality in the organization of generative grammars lies somewhere between where we are now and where we are headed. In the latter case optimality could be pursued from two directions at once, instead of only one.

Lexical-Generative Grammar (LGG), a model of grammar instantiating the logical conclusion of the trend pair, is outlined in some detail. Once introduced, this model is tested for descriptive perspicuity in areas considered to include the best examples of "transformational phenomena," those phenomena which have in the past been held to motivate the use in generative grammars of the transformational mechanisms which are entirely excluded from lexical-

generative (LG) description. LG analyses of these phenomena are seen to be at least as satisfactory as transformational analyses. It is further observed that, unlike transformational analyses, LG accounts characterize the full continua of regularity and productivity with uniformly high naturalness and directness.

Under the assumption that linguistic description and the study of language use and acquisition are of full mutual relevance, the LG model is tested for perspicuity with respect to significant findings in speech perception, comprehension, and acquisition. The LG account of linguistic structure, unlike the transformational alternative, is found to be entirely compatible with these findings; in fact, it renders them expectable.

Finally, the LG model is examined in light of current trends of progressive differentiation and integration in linguistic theory. It is suggested that the LG model of grammatical structure promises to contribute significantly to each of the trends as well as to their confluence.

LGG, in conclusion, appears to specify the optimal organization of a generative grammar: that of a lexicon.

**DEVELOPMENTAL CHANGES IN CHILDREN'S AWARENESS OF SOME VERB PROPOSITIONAL SCHEMATA**

Order No. 8126625

DOLLAGHAN, CHRISTINE ANN, Ph.D. *The University of Wisconsin-Madison*, 1981. 115pp. Supervisor: Professor Jon F. Miller

Part of children's developing semantic-syntactic skill involves refinement of their representations of verb meanings. In addition to componential aspects of verb meaning, children must also acquire a representation of each verb's combinatorial requirements or propositional schema, i.e., the number of arguments with which it may be obligatorily or optionally associated at the level of surface structure. Sentences from which obligatory arguments are missing are judged to be deviant by most adult speakers, but there is no discernible rule which can be used to predict whether an argument is obligatory for a given verb; this information must be represented in the lexicon on a verb-by-verb basis.

The present study examined developmental changes in children's awareness of the propositional schemata of twenty-two early-learned verbs. Twenty-five normal children at each of three age groups (mean ages: 4;6, 7;3, and 10;0) judged the acceptability of forty-four sentences contrasting on the dimension of argument obligatoriness, and corrected those sentences which they judged to be deviant. Significant developmental changes were found in children's awareness of the surface structure propositional schemata of these verbs. Adultlike awareness of propositional requirements was not yet present at age ten. Both judgment and correction results indicated that children were initially unaware that some arguments are obligatory. After learning that some arguments are obligatory, they also made the incorrect assumption that all arguments are obligatory. Adult competence requires learning that verb argument requirements are actually lexically-specific rather than rule-governed; this knowledge was not complete in the ten-year-old subjects. Children's corrections further revealed age-related increases in attention to and successful manipulation of surface structure sentence characteristics. Results suggest the need to consider both combinatorial and componential aspects in the study of children's acquisition of verb meaning.

## INCORPORATING BORROWING RATES IN LEXICOSTATISTICAL TREE RECONSTRUCTION

EMBLETON, SHEILA MARGARET, Ph.D. *University of Toronto (Canada)*, 1981.

A persistent concern of lexicostatistics (and of its more ambitious precursor, glottochronology) has been to eliminate all meanings susceptible to borrowing from the test-list which is used in family-tree reconstruction for a group of related languages. However, it is not clear that any meanings exist which are completely immune to borrowing, especially in situations of large-scale language contact. There are also considerable statistical advantages in the use of a longer test-list. Thus lexicostatistical tree reconstruction methods should be improved by incorporating borrowing rates as well as replacement rates in the reconstruction process. The system of differential equations necessary for this improved reconstruction algorithm (where the replacement rate  $r$  and the borrowing rate  $b$  are known) is derived, and a computer simulation of the divergence of a language family (with 10 present-day languages) involving both lexical replacement and borrowing is presented. The results of comparisons of the reconstructed trees with the computer-generated trees for different lengths of test-list and for different values of  $r$  and of  $b$  show that a high degree of accuracy, both in the topology of the tree and in its relative branch lengths, can be obtained, even for values of  $r$  and  $b$  considerably higher than those found in natural language. All previous methods yield trees which rapidly decrease in topological accuracy as  $b$  increases. Comparison of results for the different lengths of test-list (100, 200, and 500 meanings) is shown to have implications as to the 'best' length of test-list to use in practical

applications of the reconstruction algorithm. Finally, the reconstruction algorithm is applied to 14 present-day Germanic languages, where the replacement rates  $r_i$  are allowed to vary for each language and the borrowing rates  $b_j$  are allowed to vary for each language pair. All the word-lists (14 present-day Germanic languages, 9 historically-attested Germanic languages) are included, as well as all the rate calculations. The tree reconstructed by this improved method is in accord with widely-held linguistic views of the history of the Germanic language family, whereas trees reconstructed by lexicostatistical methods which ignore borrowing as a factor in the language change process contradict known historical facts. Thus the reconstruction algorithm presented in this thesis represents a significant improvement over previous methods, and shows that lexicostatistical methods can be successful when applied to real linguistic data, even when a large amount of borrowing has taken place.

## TOWARDS A REORIENTATION OF LINGUISTIC THEORY

Order No. 8202973

FAIS, LAUREL CATHERINE, Ph.D. *Indiana University*, 1981. 252pp.

Theoretical assumptions have come to constitute more and more of the data of current linguistic work in the Revised Extended Standard theory. This is a shift away from the use of speaker/hearer judgments as primary data. In this thesis, the speaker/hearer heuristic is proposed as a means of ensuring that this shift does not jeopardize the empirical status of linguistic science. The heuristic, essentially an addition to the methodology, requires that all theoretical proposals be confirmed by empirical evidence comprised of speaker/hearer judgments. Because this sort of evidence is lacking for the PRO-trace distinction currently used in REST, the analysis offered of questions and infinitival complements to verbs and adjectives utilizes instead the notion "gap." Gap is the conflation of PRO and trace. Control of gap is the vehicle by which the analysis accounts for the configuration of data involved in these constructions in a way which is consistent with the speaker/hearer heuristic. In a review of pertinent literature, it is shown that many current approaches are actually easily re-interpreted to be consistent with the heuristic. There is, however, one particular type of example, here called "non-pairs," where the heuristic is incompatible with the results of REST. The existence of these examples undermines the empirical status of current linguistic theory. Finally, the notion "non-pairs" is discussed. The heuristic is shown to be compatible with a more useful interpretation of this notion than is current in

## THE EFFECT OF SIMILARITY AND DISSIMILARITY BETWEEN STUDENT COGNITIVE ABILITIES AND STYLES AND TEACHER COGNITIVE ABILITIES AND STYLES AND ACHIEVEMENT IN LINGUISTICS

Order No. DA8206015

FENTON, D. JASON, Ph.D. *University of California, Los Angeles*, 1981. 706pp. Chair: Professor John Hawkins.

**Purpose.** The purposes of this study were: (1) to document the ways in which high and low achieving students differ in terms of sociological, psychological and personality factors, (2) to provide a conceptual framework of cognitive learning style theory and the cognitive style dimensions thought to be important to student learning outcomes, (3) to construct a theoretical educational achievement model that logically relates these sociological, psychological, personality, and learning style factors to student achievement, (4) to test this theoretical model through the use of statistical analysis leading to the formulation of an articulated model that indicates the amount of influence that these factors have on each other and on student achievement, and (5) to determine whether student achievement is higher for those students who are similar in selected cognitive aptitudes and learning styles to those of their teachers than for those who are less similar.

**Method.** A quasi-experimental study was conducted in three university level linguistics classes forming the three treatment groups. Subjects were selected on the basis of scheduling priorities and classroom space available. Though not random, this procedure resulted in classes that did not differ significantly from each other. The three treatment groups consisted of 41 students, 19 students, and 15 students.

**Instrumentation.** The instrumentation phase was designed (1) to obtain necessary student background and biographical information, (2) to measure selected cognitive performance aptitudes and learning styles of students and instructors, (3) to compare the degree of similarity on these aptitude and style measures between students and instructors, and (4) to investigate the effects of cognitive similarity and dissimilarity on student achievement.

Students and instructors completed a battery of background aptitude and style measures. A number of achievement outcome measures were constructed for the immediate and delayed posttests. Teaching style was observed during the study and evaluations on a field-dependent-independent teaching scale were recorded.

**Statistical Treatment.** Initial statistical procedures included an examination of zero-order correlations between aptitude variables, comparisons of means and standard deviations of pretreatment measures across groups, and correlations between aptitudes and outcomes within and between groups. The major statistical procedures involved the use of multiple regression analysis to test for ATI on three levels of student/instructor style and aptitude match. An articulated achievement model was developed to show the relative contributions of aptitude and style variables to achievement outcomes. Finally, the null hypotheses were tested by regression analysis.

**Findings.** A summary of these findings indicate that (1) digital aptitude is the most powerful direct predictor of achievement outcomes after controlling for background variables, (2) analog aptitude has a significant effect on the other aptitude and style variables in the achievement model, but it has little independent effect on achievement outcomes, (3) with the exception of digital aptitude, none of the other aptitude and style variables show any significant direct effects on achievement when background effects are controlled, and (4) the closer the match between student and instructor on these aptitude and style measures, the better the achievement outcomes. This key finding is particularly powerful for digital aptitude, less so for the other aptitude and style measures.

**Recommendations.** In conclusion, more research is needed, using ATI methods and insights to help explain individual differences in classroom achievement. The results of this study suggest that cognitive aptitude performance and learning style preference provide viable constructs for ATI research. Further, investigations of the interactions of these and similar constructs with instructional treatments could result in a better match of teacher, curriculum materials, and student. This could only result in enhancing learning outcomes for all our students.



**AMERICAN INDIAN ENGLISH IN HISTORY AND LITERATURE:  
THE EVOLUTION OF A PIDGIN FROM REALITY TO  
STEREOTYPE**

Order No. 8202975

FLANIGAN, BEVERLY OLSON, Ph.D. *Indiana University*, 1981. 278pp.  
Director: Albert Valdman

Although linguists have from time to time suggested the existence of a kind of pidgin English used by early explorers and colonizers in their contacts with the North American natives, few studies have been made of this reduced English beyond the compiling of words and phrases from historical journals and documents in an attempt to prove either the transmission of a kind of "substandard" or "baby talk" English or the spread of a black Plantation Creole to the Indians. Both views presuppose the existence of a generalized pidgin English already in widespread use by the crews of the English trading vessels in West Africa, the Caribbean, and the North Atlantic; this form of contact English, marked by a reduced morphosyntactic system and a small and functionally restricted lexicon, was, both views agree, modeled after the Latin-derived pidgins long used in the Mediterranean and the Levant, including the Lingua Franca and its Portuguese pidgin successor.

An examination of historical records and literary works from the colonial period to the present bears out my contention that such a reduced or pidginized English was widely used in contacts between American Indians and whites. The journals of Virginia and New England, as well as the writings of Cooper, Melville, Thoreau, Simms, Garland, and Remington, reflect a consciousness of Indian English as a distinctive variety of speech, such writers of sea narratives as DeFoe and Dana manifest the similarity of that variety to the kinds of pidgin English used around the world. The later stereotyping of this pidginized speech in the films, comic strips, and popular fiction of our own century has tended to obscure its real-life origins, but recent writers, particularly American Indian authors themselves, have tried to correct these misconceptions while at the same time using the pidginized forms in a historically valid way. Linguists and educators have also begun to explore the connections between this historically broken speech and the problems which modern Indians have in mastering standard English; the implications of studies of second language acquisition in general for the acquisition of English by native Americans are examined briefly in the conclusion of this study.

**PHONIC FITNESS OF SELECTED GRAPHEME-PHONEME  
CORRESPONDENCE, PHONOGRAMS, AND PHONIC  
GENERALIZATIONS**

Order No. DA8207888

GATES, LOUIS JAMES, Ed.D. *University of the Pacific*, 1981. 167pp.

This study was designed (1) to identify the phonemic fitness of selected graphemes, or, when necessary, the phonemic interrelationship between graphemes and phonograms, and (2) to develop phonic generalizations based upon this examination. For the study a computerized corpus of 17,211 words was used that was, with minimal modifications, originally developed for the Stanford Spelling Project. The respellings used in the Stanford study were, however, recoded to conform to the initial respellings found in the *American Heritage Dictionary*. After this recoding was completed, the words in the corpus were reorganized according to their frequency of occurrence. This reorganization enabled the researcher to analyze the high frequency words apart from those of lower frequencies. In addition, the minimal criterion accepted for letters or letter combinations to be considered phonemically fit was that at least 75 percent of the grapheme-phoneme correspondence was to be represented by at most two or, in the case of single vowels, three phonemes or phoneme combinations.

A computer was used to get a listing of all of the words found in the corpus that contained specified letters or letter combinations. If phonemic regularity was noted in the listing for any particular grapheme, no further analysis was made. However, if an identified grapheme showed a lack of phonemic fitness, it was examined to determine if certain phonograms or letter combinations accounted for a portion of the irregularity. If such phonograms or letter combinations were found, they were treated apart from the grapheme which was in turn reexamined to determine its phonemic fitness.

11, 116 different graphemes and phonograms were identified: included single and adjacent vowels, vowel phonograms, single compound consonant graphemes, and consonant related

**A MINIATURE LINGUISTIC ANALYSIS OF SIGHT WORD  
ACQUISITION AND GENERALIZATION** Order No. DA8208451  
GOROON, PETER ALAN, Ph.D. *George Peabody College for Teachers of  
Vanderbilt University*, 1981. 98pp. Major Professor: Richard E. Shores

This study was designed to extend the present literature which has examined the development of generalized responding to printed word recognition ability. Three normal preschool children were trained to respond to printed word stimuli, which were composed of combinations of initial consonant and final vowel-consonant phonograms. A multiple baseline across words was used to establish experimental control and to assess generalized use of the component structure of words trained to respond correctly to novel recombinations of these components. A stepwise training sequence developed by Foss (1968) failed to produce generalized responding by any of the subjects. Extended training which removed the overlap of components, but served to add exemplars within those classes previously trained, resulted in more rapid acquisition of stimuli, improved retention, and generalized responding on the part of two of the three subjects. Error analysis taken throughout all phases of training concurred with previous reading research on stimulus confusion. The results of this study are discussed in terms of previous research on the matrix analysis, and implications for future research on word recognition ability.

*Reference*

Foss, D. Learning and discovery in the acquisition of structured material: Effects of number of items and their sequence. *Journal of Experimental Psychology*, 1968, 77(2), 341-344.

**LINGUISTIC ABILITIES OF CHILDREN WITH FETAL  
ALCOHOL SYNDROME**

Order No. DA8212547

HAMILTON, MARILYN ANN, Ph.D. *University of Washington*, 1981. 83pp.  
Chairperson: Professor Fred Minifie

Linguistic delays are a frequent concomitant of reduced intellectual ability. The present study examined linguistic development in intellectually impaired children with fetal alcohol syndrome (FAS). The purposes of the study were to describe the level of linguistic functioning in a group of five-year-old children with FAS and to assess the impact of reduced intellectual ability on the linguistic performances of these children. The linguistic performances of FAS children were compared to similar data from normally developing children from comparable age, sex and socioeconomic groupings, as well as to the following control groups: (1) a group of three-year-old MLU matched normal children, and (2) a group of five-year-old intellectually matched children with Prader-Willi syndrome. These subjects' linguistic performances were assessed by examining syntactic, semantic, and pragmatic development. In addition, since short-term memory deficits have been reported to occur in adults who misuse alcohol, short-term memory capabilities were examined in FAS children to determine if similar deficits existed. When compared to normative data as well as to MLU matched younger normal children, the results of this study clearly indicated that children with FAS were delayed in syntactic, semantic, pragmatic, and short-term memory functioning. The linguistic delays were more pronounced in production rather than comprehension of linguistic information. Short-term memory deficits were more pronounced in short-term memory for related syllables (sentences) rather than for unrelated word series. The results of this study did not substantiate the impact of reduced intellectual ability on the linguistic performances observed in FAS children.

FROM LINGUISTIC THEORY TO MEANING IN EDUCATIONAL PRACTICE: THE UTILIZATION OF THE LINGUISTIC THEORETICAL NOTION OF "FOREGROUNDING" TO PROVIDE A CONCEPTUAL FRAMEWORK FOR ANALYZING LANGUAGE PHENOMENA IN FORMAL EDUCATIONAL SETTINGS

Order No. 8201103

HARRIS, ALAN CHARLES. Ph.D. *University of California, Los Angeles*, 1981 352pp. Chair: Professor Louise L. Tyler

Schooling activities become purposeful for children in direct relation to the personal meanings these activities evoke. Children's interests, concerns, and meanings for schooling become indispensable data for understanding the process of decision-making and the consequences of teachers' choices. It is important that educators have some means at their disposal for ascertaining, examining, understanding, and interpreting the personal meanings that children-as-learners bring to and create from the circumstances of "schooling."

This study has an outcome in helping to establish linguistic parameters for some of the meaningfulness conveyed by students in school. It provides what may be considered indispensable data for arriving at decisions regarding such educational essentials as the

formulation and design of curriculum. This study is a *strong* proposal for educators to utilize the linguistic conceptual framework herein in order to study, analyze and understand children's associative reactions to queries posed to them regarding aspects of schooling.

In this study, the linguistic phenomenon of "foregrounding" is examined as a means of revealing to educators some of the meanings that students bring to and take from school. "Foregrounding" is a linguistic process in which some element or elements, such as words, phrases, stressings or intonations, are generated by the communicator/language-user in sentences and are given prominence or made more meaningfully significant.

The linguistic literature on "foregrounding" is reviewed and a conceptual framework is created through a synthesis of the concepts and insights that relate to such phenomena that are generally classed as instances of foregrounding. These instances are viewed as resulting from the manipulation of such linguistic devices as *syntactic movement, stress movement, intonation* and the like.

The conceptual framework is a kind of taxonomy of foregrounding devices. The validation of the framework is achieved by interviewing children in an elementary school, gathering their responses to a series of queries designed to get the individual talking about schooling, and, finally, applying the foregrounding taxonomy framework to these utterances. The sentences that arise as a result of foregrounding are listed along with their probable underlying meanings.

It is the purpose of the study to demonstrate that the individual, in talking about "school," will reveal underlying personal notions regarding schooling--if attention is paid in the analysis to certain linguistic devices or processes. This is successfully accomplished in that the framework can be applied to the significant subset of foregrounded utterances so that heightened meaningfulness is revealed in a significant number of cases. These are thus statements that contribute to and have import for aspects of education at theoretical, practical, and methodological levels. This involves, for example, everything from a strong suggestion that teachers become or be made more linguistically aware of what their students are saying, to a strong recommendation that educators pay careful attention to meaningfulness in the construction of textbook material, to an implication that if such a conceptual framework were to be used to analyze all kinds of linguistic output on the part of participants in an educational setting, the results would be quite beneficial.

This study, then, is a first step toward devising an applied interpretive "heuristic" for analyzing language phenomena emerging from schooling or educationally-related situations. Some of the implications drawn from the application of the conceptual framework to language output in or regarding an educational situation may lead to changes in the nature of instruction, in the modeling or formulation of curriculum, or in the nature of the institutions that undertake the task of educating.

DELETION AND INTERPRETATION IN COMPARATIVES

JAYASEELAN, KARATTUPARAMBIL ACHUTHAN, Ph.D. *Simon Fraser University (Canada)*, 1981. Supervisor: Brian E. Newton

This thesis attempts, firstly, to specify a constrained set of, interpretation rules that map comparative sentences onto their logical form. Secondly, it attempts to reduce the diverse deletion rules postulated for comparatives to a rule deleting an underlying *what*; the semantic functions fulfilled by the other deletion rules are shown to be better handled by interpretive mechanisms. Subdeletion is explained, as a case of interpolation into a gap. Thirdly, it argues that Subjacency is neither a condition on transformations, nor a condition on trace binding, but a condition on quantifier binding at the level of Logical Form.

Chapter One identifies five deletion processes that have been postulated in comparatives: Comparative Deletion, Subdeletion, and three rules of Comparative Ellipsis. It also gives evidence for a preposition-triggered deletion of *what*. In Chapter Two, the Comparative Ellipsis rules are eliminated. Chapter Three proposes the interpretation rules that map comparatives onto their logical form. Chapter Four sets out the new analysis of Subdeletion, and Chapter Five argues that Subjacency is a condition on quantifier binding.

SEMANTIC AND SYNTACTIC ASPECTS OF CHILDREN'S QUESTIONS AT THREE LINGUISTIC STAGES

Order No. 8126637

KLEE, THOMAS MICHAEL, Ph.D. *The University of Wisconsin - Madison*, 1981, 114pp. Supervisor: Professor Robin S. Chapman

The traditional developmental account of children's early question production was evaluated in this cross-sectional study with respect to developmental change in the question types asked and with respect to developmental change in structural characteristics of the questions. *What* and *where* questions are suggested to be among the earliest emerging forms, followed by *why* questions, with *how*, *who*, *when*, and other less frequently occurring questions developing lastly. This ontogenetic sequence has been replicated in several studies of English-speaking children and demonstrated cross-linguistically. Further, a syntactic account of children's interrogative system has been proposed; namely, that routine syntactic frames are initially used by the child, followed by a stage where auxiliary verbs are produced but not inverted with the subject noun phrase, and finally resulting in a stage characterized by correct inversion.

Six children at each of three linguistic stages, defined by mean utterance length in morphemes and ranging from 2.50-3.99, were selected for study. The children, ranging in age from 25-47 months, demonstrated normal hearing and linguistic development and were chosen from a middle- to upper-middle class Midwestern U.S. community. Over 3400 questions were gathered from the 18 children through 40-minute language samples as well as through diaries of the children kept by parents.

The developmental sequence of the various question types was supported by the results of this study. Further, children's use of auxiliary verbs in questions (mainly, forms of *can*, *do*, and *be*) in obligatory contexts increased over the developmental range studied and did not differ in distribution from that found for auxiliary verbs in non-questions. No evidence was found to substantiate the existence of a proposed intermediate stage of acquisition characterized by failure to invert auxiliaries. As children begin to include auxiliary verbs in questions, they correctly invert them with subject noun phrase. Moreover, the auxiliary verb system appears to develop in parallel in questions and in non-interrogatives in the linguistic periods studied.

**COMMUNICATIVE COMPETENCE AND CONCEPTUAL  
COMPETENCE IN KINDERGARTEN CHILDREN: AN  
ETHNOGRAPHIC STUDY** Order No. DA8210102  
LAZARUS, PEGGY GROSS, Ph.D. *The University of New Mexico*, 1981.  
317pp.

At present, only a limited understanding of the full range of children's communicative and conceptual competence exists because most data are derived from teacher reports and test results. More extensive observation of children's language in the classroom, using ethnographic methods, is needed to reveal competencies not previously identified. To facilitate the identification of these competencies, a setting in which children's language production can be monitored is essential.

In this investigation, entire sessions of a middle-class public kindergarten were observed, audio-taped, analyzed, and reported. Transcriptions were repeatedly reviewed for emergent categories. The category most revealing of communicative and conceptual competence, namely, children's language for problem solving, was used for analysis. The problems and competencies were found to be distributed among the sociolinguistic, linguistic, social, and cognitive areas. For the sociolinguistic area, Hymes's (1972) framework was used. Through this analysis, a conflict between the children's and the teacher's communicative goals was identified. In the cognitive area, Piaget's approach to determining competence could not be used because there were so few diagnostic examples produced spontaneously by the children. Instead, Hughes's (1967) hierarchy of mental activity was used.

Competencies identified by area included kindergarteners' sociolinguistic competence in awareness of regularities of classroom speech, and their facility in varying the components of ways of speaking; linguistic competence in demanding and providing clarification of lexical and semantic terms; social competence in the use of knowledge of the roles and rules of society for the integration of personal and group requirements; and cognitive competence in the application of high levels of mental activity in domains of personal interest and for problem solving in interaction.

The students lacked competence with patterns of speech particular to schooling. Their lack of competence with the morphological system did not affect communication and was not a factor in determining linguistic competence.

In all areas, the children were not just naive recipients of new school knowledge but active processors of that material. Suggestions for further research and for teachers include the use of broader frameworks for observation to capture or develop sensitivity to the richness, complexity, and variety of children's competencies in school.

**METAPHORICITY, LANGUAGE, AND MIND**

Order No. DA8205652

LEONE, SHIRLEY, Ph.D. *The Union for Experimenting Colleges and Universities*, 1980. 167pp.

This is a study of the force of metaphor in language behavior. It proposes that language usages, ranging from the scientific to the schizophrenic, can be understood and ordered in terms of two basic and opposing principles: the literal and the metaphorical.

All language behavior embodies two opposing tendencies; a pull toward the literal-discursive-rational and an alternate pull toward the metaphorical-associational-analogical. The distinctive character of the differing usages flows from the configuration resulting from the dominance of one of these pulls.

"Metaphoricity" is examined as a pervasive presence in all language behavior, and is defined, in the classical sense, as the unifying force which intuitively likens and creates transferences. The metaphorical is rooted in the ambiguous, connotative, associational nature of language; the literal is rooted in the univocal, denotational, rational nature of language.

This work presents a continuum of usages: the scientific; the expository; the common, everyday language closest to living experience; the poetic, the schizophrenic.

Metaphoricity is traced from its most dominant and disruptive in the language of schizophrenia, to its more modulated power in the poetic. The mid-range of the continuum--the common, everyday language--exhibits the tensions between the metaphorical and the literal most explicitly. Metaphoricity wanes in the language of exposition as the literal becomes more dominant and, finally, in scientific usage (i.e. mathematical and computer) all metaphorical tendencies are suppressed in favor of precise univocality.

Greatest attention is given to "common everyday usage closest to living experience". Metaphoricity in both overt and hidden form is explored. Overt metaphoricity is expressed through slang and street language, trade jingo and new technology vocabulary, folk language, idiom and proverb, advertising and other persuasions. A special section is devoted to "Hidden Metaphoricity" which explores the presence of unnoticed puns, double entendre, and word play woven, almost imperceptibly, into ordinary utterance. Such non-deliberate associations attest to the pull toward metaphoricity inherent in language behavior.

The beginning of this work discusses the Chomskian paradigm in its relation to the psychological study of language, and the difficulty of a theory which cannot address language behavior and surface structure or the variety of usages which mark living language. It points to the burgeoning interest in metaphor as promising more fruitful possibilities for psychological study.

The final portion speculates on explanation of language behavior, and looks to Ernest Cassirer's work on the symbolic nature of the human mind. Cassirer's insight that language contains two entirely different symbolizing modes (what he has called 'the form of discursive logic' and the form of 'creative imagination') relates to the distinctions being made between the literal and the metaphorical. Freud's work is considered, but from an unconventional point of view, suggesting that his work has more to tell about language than he ever dreamed and provides tools with which to identify metaphoricity in language.

**THE INFLUENCE OF LANGUAGE ABILITY, AGE AND  
SOCIOECONOMIC STATUS ON LANGUAGE USE**

Order No. DA8203688

LIEBERMAN, RITA JANE, Ph.D. *The University of Florida*, 1981. 292pp.  
Chairman. Thomas B. Abbott

Language is the process by which children succeed or fail in school. Because language is an important subject of instruction as well as the process by which that instruction is achieved, it is imperative that strategies of language use necessary for school success be identified and measured.

The purpose of this study was (1) to determine the influence of language ability, age and socioeconomic status on children's language use; and (2) to examine the relationship and predictive accuracy between measures of linguistic performance, academic achievement and language use.

Language use was evaluated with the *Functional Inventory of Cognitive Communication Strategies (FICCS)*, a structured interview which elicited four language use strategies: Reporting, Reasoning, Predicting and Projecting.

The influence of language ability on language use was examined by comparing language-impaired children to two groups of language-normal children, one matched for age and one matched for utterance length. Performance of the language-normal group matched for age was significantly superior to that of the language-impaired group. No significant differences were observed between the language-normal group matched for utterance length and the language-impaired group. The language-impaired group achieve significantly lower overall scores than their language-normal peers but higher scores than their younger, normal counterparts matched for utterance length, suggesting that the communicative function of the impaired children was better than their linguistic skills would imply.



The influence of age and socioeconomic status on language use was evaluated using a factorial design, with two age levels (6 years and 7 years) and two social class levels (lower and higher). The language normal 6-year-olds achieved significantly higher scores than the language-normal 7-year-olds on Projecting strategies.

Correlation analyses between performance on FICCS and measures of linguistic ability indicated a strong relationship between FICCS and nonstandardized measures of language ability but not for standardized. These findings suggest that spontaneous language sampling, through its preservation of the interactive nature of communication, provides a more powerful correlate use than contextual standardized tools. The relationship between FICCS and measures of academic achievement was modest, indicating that language use and other factors contribute to success in the classroom.

#### A LEXICO-SEMANTIC ANALYSIS OF ENGLISH VERB PARTICLE CONSTRUCTIONS WITH OUT AND UP

Order No. DA8205341

LINONER, SUSAN JEAN, Ph.D. University of California, San Diego, 1981. 272pp. Chairman, Professor Ronald W. Langacker

The semantic structure of Verb Particle Constructions (VPCs) is examined within the framework of Ronald Langacker's Space Grammar. In Chapter I, VPCs are identified as complex verbs like *toss out* and *run up* (e.g., *a bill*). They are to be distinguished from Verb Prepositional Phrase Constructions like *run up a hill* by various syntactic and prosodic tendencies. Both "literal" and "idiomatic" complex verbs are classified as VPCs; it is argued, following Bolinger (1971) and Decker (1978), that a syntactic distinction between the two is unjustified.

The central problem addressed in this dissertation is whether particles like *out* and *up* are meaningful in VPCs--that is, whether VPCs are analyzable, where analyzability is the salience of the meanings of components in the meaning of the whole. Investigators like Fraser (1976a) have claimed that particles are generally not meaningful and that the majority of VPCs must be listed in the lexicon as arbitrary and unanalyzable idioms. Among the assumptions underlying this claim are (i) *out* or *up* has a single, directional meaning if it has any meaning at all and (ii) complex structures are either fully analyzable or completely opaque, and this distinction corresponds to a sharp division between rule-generated items (syntax) and listed items (lexicon). Space Grammar rejects these assumptions, positing a usage-based model in which particular conventional units coexist with the generalizations that subsume them. Space Grammar recognizes a continuum between so-called syntactic and lexical structures based on degrees of analyzability, productivity, and regularity.

The central claim of this dissertation is that particles almost invariably contribute to the meaning of VPCs; lexical items like *out* and *up* have many meanings, both concrete and abstract, and these meanings are related so that *put* and *up* comprise unified concepts. To substantiate this claim, corpora of 600 VPCs with *out* and 1200 with *up* were examined and diverse semantic patterns were established. Each predicate *OUT* and *UP* is characterized as a *schematic hierarchy*, a network of specific meanings together with the generalizations (*schemas*) speakers extract from them at various levels of specificity. Chapter II details a possible network for *OUT*. Three major subschemas are posited ("removal," "expansion," and "departure") subsuming a variety of spatial configurations as well as metaphoric extensions into abstract domains. Chapter III characterizes the kinds of relations categorized as *UP*. Two major subschemas ("vertically higher" and "approach") are linked via a

#### TOWARD AN INTERACTIVE PHONOLOGY OF THE ENGLISH SYLLABLE

Order No. 8128658

McCLENON, CHARLES LEE, Ph.D. The University of Texas at Austin, 1981. 116pp. Supervisor: Robert D. King

A definition of the syllable, as one rise and fall in projected intensity, is offered. By this definition, the syllable becomes a suprasegmental unit with physical substance and perceptual consequence. Experimental evidence is presented to show that in English this intensity function is in part phonologically governed, not always a phonetically predictable result of segment structure.

It thus becomes a problem for phonologists to describe the process by which an intensity function is mapped onto a series of segments which thereby become a sequence of "syllables." A very preliminary description of this mapping, for English, borrowing from the core-and-affix model of Fujimura & Lovins (1977) is offered.

#### FIELD INDEPENDENCE, GRAMMATICAL AWARENESS, AND READING ABILITY IN SECOND GRADE CHILDREN

Order No. 8200255

ROUNDS, SUSAN ASHLEY, Ph.D. University of California, Berkeley, 1981. 255pp.

Psycholinguists, developmental psychologists, and others interested in language development have recently begun to focus on metalinguistic awareness as one factor that may account for the wide range of reading ability which becomes apparent in any classroom almost as soon as reading instruction begins. Broadly defined, metalinguistic awareness is the ability to deliberately make language the object of thought--to reflect on aspects of linguistic structure, such as syntax or phonetic segments, which are usually processed automatically. It appears to require a certain minimum level of cognitive development and begins to appear in children during their first years in school.

The research described in this dissertation was a training study which focused on one aspect of metalinguistic awareness--the awareness of grammatical structure--and its possible role in the development of reading ability in second grade children. The influence of cognitive factors--level of cognitive development and degree of field independence--on grammatical awareness and on reading ability was also investigated, as well as the effects of training which was aimed at increasing grammatical awareness. Theoretical justification for predicted interrelationships among grammatical awareness, field independence (FDI), level of cognitive development (M-level), and reading ability was derived in part from Pascual-Leone's Theory of Constructive Operators, which is briefly summarized in the text.

Subjects in the study were 44 white, second grade children from a middle class suburban public school. Pre-tests measured their level of cognitive development (M-level), degree of field independence (FDI), grammatical awareness, and reading ability. Grammatical awareness was measured by the Sentence Completion Test (SECO) developed by the author. Cloze tests and measures of eye-voice span were chosen to measure reading ability because it was felt that performance on those tasks would reflect children's ability to use their knowledge of grammatical structure better than would standardized tests of reading ability.

Children were ranked according to FDI level and randomly assigned to either a treatment or a control group. Children in both groups participated with the experimenter in ten individual 15 minute sessions over a seven-week period. Children in the control group played games involving phonics and spelling, while children in the treatment group were given tasks which required them to manipulate grammatical elements in some way. Grammatical awareness and reading ability were measured again in post-tests administered after the training was completed.

Research hypotheses fell into four categories: the relationship between FDI and grammatical awareness; the relationship between FDI and reading ability; the relationship between grammatical awareness and reading ability; and the effect of the training on grammatical awareness and reading ability. It was predicted that field independent (FI) children would have more grammatical awareness than field dependent (FD) children and would be better readers. It was also predicted that children with high levels of grammatical awareness would be better readers than those with less grammatical awareness. It was expected that children who received training would have a greater increase in post-test reading and SECO scores than would control group children. In addition an interaction between style and treatment was predicted: FI children in the treatment group would have greater increases in post-test reading and SECO scores than would FD children in the same group.

Many of the predicted relationships were confirmed by the study. Moderate to strong correlations--ranging from .43 to .79--were found between FDI and grammatical awareness, FDI and reading, and grammatical awareness and reading, and they remained significant even when level of cognitive development was partialled out. The training made no difference in the post-test scores of the treatment group as a whole, but there was an interaction of style and treatment on post-test SECO scores. FI children had a greater increase in post-test SECO scores than did FD children.

A further analysis was made to determine the respective roles of cognitive development, FDI, and grammatical awareness in predicting reading ability.

#### APPLE NOSES AND POPSICLE TOESES: A DEVELOPMENTAL INVESTIGATION OF METAPHORICAL COMPREHENSION

Order No. 8129099

SILTANEN, SUSAN ANN, Ph.D. *The Ohio State University*, 1981. 281pp.

Adviser: Professor Donald J. Cegala

Numerous language scholars have argued that most of the current language comprehension series are incomplete and inadequate because they do not seem to be able to account for how non-literal language is understood. These scholars have called for a comprehensive theory of language processing that can account for both literal and non-literal meaning. Accordingly, this study attempted to make a contribution to the construction of a comprehensive theory of language processing by identifying significant differences in adult's and children's metaphorical comprehension abilities. Metaphorical comprehension was chosen because it is unique and different from other forms of non-literal language in that the literal meanings of the words are necessary but not sufficient for understanding a metaphor. A developmental theory of metaphorical comprehension and five hypotheses were generated. Two hundred and forty six subjects from 3 to 31-years-old were given a 16-item metaphorical comprehension test. The test metaphors varied in difficulty and were presented in a story context. After hearing or reading the story, subjects were asked, "What does it mean to say . . . ?" Their open-ended responses were coded either: no comprehension; literal, perceptually based, conceptually based, or perceptually-conceptually based metaphorical comprehension based on the type of grounds indicated. The hypotheses were generally supported: the 5-year-olds comprehended the easy metaphors providing perceptually based similarities; the 6-8-year-olds comprehended the easy and some moderate metaphors providing primarily perceptually based grounds; the 9-11-year-olds comprehended the easy, moderate, and some difficult metaphors providing perceptually and some conceptually based grounds; and the 12 years plus subjects comprehended easy, moderate, and difficult metaphors providing some perceptually and more conceptually based grounds. The results were discussed in terms of the types of intersecting categories.

#### A COMPARISON OF THE USE AND GRAMMATICAL STRUCTURE OF THE LANGUAGE OF CHILDREN ATTENDING A CHILD CARE CENTER AND A PRESCHOOL

SOMAWATHIE, DISSANAYAKE M., Ed.D. *University of Southern California*, 1982. Chairperson: Professor Margaret E. Smart

**Purpose.** The purpose was to determine whether children who attended a child care center for long periods of the day would have greater language competence than children who attended a morning preschool. Comparisons between groups were made on: (1) social and egocentric uses of language; (2) mean length of utterances (MLU); (3) longest utterances (upper bound); (4) frequency of first person pronouns; and (5) pictorial sequencing of a story task. Because it was not possible to control for linguistic differences in home environments, parents of subjects were interviewed to ascertain if there were socio-economic differences.

**Procedure.** A stratified random sampling technique was used to select 16 English speaking children between the ages of 3.6-4 years, divided equally by sex, from university child care center (UCCC) and preschool (USPS),  $N = 32$ . Toy and story tasks were used to record and categorize language on uses, MLUs, upper bounds, first person pronouns, and sequencing of pictures. Data were analyzed using percentages, and where appropriate, "t" tests and chi-squares were performed ( $p < .05$ ).

**Findings.** For parental data, significant mean differences were found on number in family, length of parents' marriage, level of education, home ownership, job satisfaction, favoring UCCC. For language data, no linguistic advantages were found for UCCC subjects; both groups had higher proportion of egocentric to social language; USPS subjects used more social language, MLUs, upper bound, first person pronouns, picture sequencing, favoring UCCC.

**Conclusions.** (1) Length of attendance in a child care center is not indicative of higher language competency. (2) Home environments are different for UCCC and USPS children. (3) Regardless of center attended, 3-4 year olds use more egocentric than social language. (4) Social speech is used more frequently in USPS. (5) Children from higher socio-economic families, attending UCCC, have greater MLUs, longer utterances, and use more first person pronouns.

**Recommendations.** (1) Study relationship between home language and school. (2) Delineate specific relationship between language oriented school curricula and children's language usage and grammatical structure. (3) Study effect of adult interaction on children's language development. (4) Study differences among child care and preschool programs to ascertain which foster greater language development.

#### THE RELATIONSHIPS AMONG SUGAR-INTAKE, ATTENDING-RELATED BEHAVIOR, AND THE LANGUAGE DEVELOPMENT OF PRESCHOOL CHILDREN

Order No. 82D2268

SOUTHWORTH, JANNENE MACINTYRE, Ed.D. *University of Pittsburgh*, 1981. 113pp.

The purpose of this study was to examine the relationships among sugar-intake, attending-related behavior and language development, both receptive and expressive, in preschool children. The following research questions formed the basis of the study: (1) What is the relationship between children's sugar-intake and their attending-related behavior? (2) What is the relationship between children's attending-related behavior and their receptive language skills? (3) What is the relationship between children's attending-related behavior and their expressive language skills? (4) What is the relationship between children's sugar-intake and their receptive and expressive language skills?

The methodologies employed were as follows: (1) Parents and teachers, using National Nutrition Council survey materials and forms documented the food intake of forty-three children for six successive days in each of three successive months. (2) Parents and teachers using behavior scales (Conners, 1975) observed and documented children's behaviors with two instruments on two separate occasions. The first instrument used by the parents was a 93-item behavior scale which contained a ten-item behavior subscale relating to attention and attending-related behavior. The first instrument used by the teachers was a 39-item behavior scale containing a ten-item behavior



subscale relating to attention and attending-related behavior. The extracted ten-item scale was used by parents and teachers for their second observations. This second observation was used to verify the initial observations made by parents and teachers (Conners, 1975). (3) Children were tested on two language development measures in order to assess their level of language development. The Peabody Picture Vocabulary Test was used as a measure of receptive language and the Frankson Language Screening Test was used to assess expressive language.

The findings were as follows: (1) The strength of the relationship between the sugar-intake variable and the attending-related variable was found to be a strong one and statistically significant. (2) The strength of the relationship between the attending-related behavior variable as related to receptive language was a moderate one and statistically significant. (3) The strength of the relationship between the attending-related behavior variable as related to expressive language was a strong one and statistically significant. (4) The strength of the relationship between sugar-intake and receptive language was moderate and statistically significant while the strength of the relationship between the ingestion of sugar-intake and expressive language was a strong one that was statistically significant.

The findings strongly suggest that the relationships that were established may be part of a chain of cause-effect relationships that possibly interact one with the other. Children who do ingest large amounts of sugar and have inattentive behavior as described and observed by their parents and teachers, may experience difficulties in learning. As indicated in the review of literature (Ross, 1976) it was suggested that neurological or biochemical variables along with environmental influences may impact upon and exacerbate conditions of learning and should be closely examined. In addition, it appears that children who have difficulty in attending and are easily distracted may have difficulty in language development in the receptive area, but to a greater degree in the area of expressive language.

#### A PSYCHOLINGUISTIC STUDY OF NOUN-VERB RELATIONSHIPS IN EXPERIENTIAL-VERB ENGLISH SENTENCES

Order No. 8129482

TRUESDALE, EDWARD VANCE, JR., Ph.D. *University of South Carolina*, 1981. 144pp.

Verbs referring to mental experience in English differ in how they assign the case role "experiencer" to sentence nouns. Verbs like *enjoy* are "Left-Hand Experiencers" (LHEs) in that they assign experiencer to the left-hand noun in a simple active sentence. Verbs like *delight* are "Right-Hand Experiencers" (RHEs) in that they assign experiencer to the right-hand noun.

LHE and RHE verbs raise questions about semantic and syntactic organization in sentences. Past research has investigated whether subjects or objects of sentences are more important conceptually. Some of this research has suggested that sentences are organized conceptually in ways consistent with Chomskyan syntactic theory. However, other studies have suggested that sentences are organized conceptually in ways that are more consistent with semantic (case) theories of language.

This study reports on research in which sentences having LHE and RHE verbs were used to investigate the relative role of syntactic and semantic structure in experiential-verb English sentences. A series of experiments looked at patterns of recall and interpretation in such sentences. Three sentence-memory experiments found no effect of syntactic or semantic structure on memory for nouns and verbs. However, in experiments in which readers were asked to judge which nouns were topics of sentences, the patterns of response were significantly different for LHE and RHE verbs. The overall results suggest that the organization of the experiential-verb sentence involves complex interrelations between features of syntactic structure, semantic structure, and discourse (topic-comment) structure.

#### THE EFFECT OF LINGUISTIC AWARENESS INSTRUCTION ON LINGUISTIC AWARENESS CONCEPT DEVELOPMENT AND READING ATTITUDES OF KINDERGARTEN CHILDREN

Order No. 8201586

WALRAVEN, SUSAN TERESA, Ph.D. *University of Georgia*, 1981. 254pp. Director: Hal W. Seaton

The purpose of this study was to determine the effect of linguistic awareness instruction, sex of subject, and time of testing on linguistic awareness concept development and reading attitudes. Another purpose was to determine the relationship between linguistic awareness and reading attitudes. Twelve intact classes of kindergarten students (N = 274) were randomly assigned to one of the following treatment groups: (A) a placebo treatment of creative dramatics, art, and picture story books read by the teacher, (B) linguistic awareness instruction through typical activity-based lessons, (C) stories read by the teacher and language experience activities, and (D) picture story books read by the teacher, large group language experience activities, and linguistic awareness instruction taught through the language experience approach. Daily lesson plans for the 12-week treatment were designed to require 20 minutes of teaching time per session.

The instrument used to measure linguistic awareness concept development was the *Test of Linguistic Awareness In Reading Readiness (LARR)*. The *Children's Attitude Toward Reading Test* was used as a measure of reading attitudes. The *Kuhlmann-Anderson Test* was used as a measure of intellectual ability. This instrument was administered in September to provide information concerning intellectual differences among the groups for the purpose of varying. All other instruments were administered in January, as post-treatment measures, and again in March, as delayed post-treatment measures. Data were analyzed by two ANCOVAs, with I.Q. as the covariate and time as the repeated factor. A Pearson product-moment correlation coefficient was calculated to determine the relationship between the two dependent measures.

The findings of this study suggest that treatment had an effect on linguistic awareness scores, with Groups A, B, and D scoring significantly higher than Group C. Time of testing was found to have a significant effect on linguistic awareness scores. Sex of subject and all interactions were found to have no significant effect on LARR scores. In addition, no main effects or interactions among the variables were found to significantly affect reading attitude scores. Finally, the relationship between linguistic awareness and reading attitudes was found to be nonsignificant.

#### A SEMANTIC DESCRIPTION OF SELECTED FIRST GRADE NARRATIVES-IN-PROSE USING CASE GRAMMAR

Order No. DA8203879

WHITELEY, MARILYNN MAXWELL, Ed.D. *The University of Tennessee*, 1981. 164pp. Major Professor: J. Estill Alexander

The purpose of this study was to describe the semantic-syntactic relationships found in selections from the thirteen basal first-grade reading textbooks adopted in the State of Tennessee. The first narrative-in-prose after the mid-point in the publisher's final book for first grade was analyzed using case grammar. The data were presented in tables with a sentence-by-sentence description placed in appendices. The semantic elements within each table were rank-ordered. Verbs were categorized as either dynamic or stative. Case grammar was used to describe nominals as objective, agentive, stative/objective, experiencer, or locative. The syntax of clauses was described as fitting a pattern from: SVO, SVOC, SVC, SVA, SVOA, SVOO, or SV. Deictic elements of anaphora and cataphora were identified and counted. The modalities of negation, tense, mood, and aspect were identified and counted. The total number of sentences in each narrative was given along with the number of direct quotations. Arranged alphabetically according to publishers, the summaries of the semantic elements were presented in tables with the bibliographic entry given as the source. A rank-ordered table, a summary of the summary tables, followed the tabulation of the semantic elements from the thirteenth reader.

Each of the semantic elements was presented in a separate table and discussed. The major findings were that dynamic verbs outnumbered stative verbs. Nominals as agentives predominated followed by objectives, locatives, stative/objectives, experiences, and benefactives. The SVO clause type was counted in more instances followed consecutively by SVA, SVC, SV, SVOA, SVOO, and SVOC. Anaphoric deixis was used more often than cataphoric. Seventy-six negative modalities were identified. Of the verbal modalities, past indicative simple was the most used with present indicative simple the next most used. Eighty-one direct quotations were found in the 463 sentences in the selected narratives-in-prose.

This study should be followed by a study of the spontaneous, natural language of first grade students to examine students' oral semantic elements in comparison with the semantic elements found in basal reading texts. This study was believed to be the first of its kind to examine instructional materials for descriptions of meaning inherent in the stylistic choices of the authors.

TEMPORAL FEATURES OF INFANT SPEECH: A  
DESCRIPTION OF BABBLING PATTERNS CIRCUMSCRIBED  
BY POSTURAL ACHIEVEMENT — Order No. DA8209951  
YINGLING, JULIA MARGARET, PH.D. *University of Denver*, 1981. 224pp.

Primitive speech timing skills in infancy may bear upon the development of other temporal skills as well as the preparation for language use. The purpose of the study was to describe a period of infant babbling in terms of certain temporal characteristics of speech. In recognition of the idiosyncracies of infant maturation, the period of interest was defined by the achievement of upright posture rather than by age. The postural achievement was chosen for its proposed nurturing effect on developing human speech structures, particularly those involving respiration.

Subjects were seven infants with normal developmental histories. Recording sessions were conducted in the home and commenced when infants were five and one half months of age. Data were collected biweekly until the infant was able to sit upright, unsupported, for five minutes. Two more sessions after the achievement were completed.

Tapes from four sessions (two before and two after the postural event) were analyzed for speech segments consisting of repeated phonetic types. Five segments per sessions were submitted to spectrographic analysis and coded by phonetic type. Utterances and pauses were measured in millimeters and converted to milliseconds. Utterance frequencies per breath-group and breath-groups per repetitive segment were noted. Individual patterns were charted on graphs for utterance duration, pause duration and breath-groupings.

The research question was phrased: will the temporal characteristics of infant speech change upon achievement of an unsupported, upright seated position to reflect increased voluntary control of speech timing? Results across subjects demonstrated the following broad trends within the described period: utterance durations became shorter and more uniform, pause durations were more uniform (less variable) in sessions near the postural event than in the first and fourth sessions, the frequency of utterances per breath-group increased and became more variable, and the frequency of utterances repeated in succession, regardless of breath-groups, increased up to the event and decreased after it. Specifically, consonant/vowel types demonstrated the strongest trends and increased in frequency overall.

Results indicate that the temporal characteristics of speech do change in the described period. Trends toward uniformity of utterance durations across types, yet greater variety in the use of breath-groups, imply a progression toward the requirements of language in the growing control of speech produced in series. The increasing control of the temporal characteristics of speech implied in the findings may be interpreted as evidence of a manipulation of segmented experience; that is, individual functioning in time.